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## **WATER ALLOCATION PROGRAM DEVELOPMENT STREAMFLOW STANDARDS SUBCOMMITTEE MEETING**

### **MINUTES OF MEETING**

August 19, 2003, 1:00 p.m.

RIDEM, 295 Promenade Street, Providence, RI

**Present:** Ralph Abele (by telephone), Al Bettencourt, Rich Blodgett, Jim Campbell, Kathy Crawley, Steve Donohue, Eugenia Marks, Alisa Richardson, Liz Scott

#### **Handouts (by RIWRB):**

- Updated draft “Report of the Streamflow Subcommittee of the Water Allocation Advisory Committee – August 2003”
- Selected pages concerning stream flow references, found within Chapter 1 of the “Regulated Riparian Model Code”
- “Guidance for reading the code.txt”
- Table 3 of the “Instream Flow Assessment Tools”
- Harold Ward’s written comments on the merits of having one stream flow standard

#### **Discussion of the draft “Report of the Streamflow Subcommittee of the Water Allocation Advisory Committee – August 2003”:**

K.Crawley offered to facilitate the meeting.

L.Scott identified sections within the draft which she edited, which the group had not yet seen, which included: a title added, a reorganized introduction, a legislative mandates heading added, other minor revisions, the “Proposed Long-Term Approach for CT” was re-inserted, the “Application Issues” was added to acknowledge social and economic issues.

E.Marks requested better organization or outlining of the text.

R.Abele stated that he added Sections 5 and 6, entitled “Development Impacts on Flows” and Water Management Recommendations”.

L.Scott also added “Summary of Recommendations on Implementation of Instream Flow Standards in Rhode Island”. L.Scott recommended that the entire document be reviewed to identify sections which refer to “a majority”, and determine whether it was in fact a majority or the entire group which agreed or disagreed on a specific item.

E.Marks suggested, and the group agreed, that the “Recommendations” section be addressed first.

K.Crawley distributed the code, the code guidance, Harold Ward’s paper, and Table 3.

The subcommittee then began to review recommendations, one by one.

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### **Recommendation #1**

S.Donohue stated that he preferred wording from the CT report which recommended limiting the interim method to only new withdrawals and for planning purposes.

K.Crawley recommended that the subcommittee consider the goal or mission of the group, in order to remain focused.

S.Donohue added that he was not convinced that the CT paper is the correct approach or basis for the RI document.

However, E.Marks felt that the CT document was worked on for several years, and backed up by science . . . that the two states had similar rainfall, geology and other characteristics.

L.Scott stated that she looked at many technical issues, and felt that the subcommittee could rely on CT's analyses, and portions of their text would probably be applicable to RI, but may need to be reorganized.

K.Crawley felt that the RI draft needs to better focus on RI-related issues.

R.Blodgett stated his concerns with the phrase "permitting". Additionally, that there existed dual functions . . . one of which was the RIWRB's planning functions, and the other being DEM's permitting functions.

E.Marks stated that the both planning and permitting are integrated, and that the RI document should consider both.

R.Blodgett felt there existed a need to focus on the planning elements of water use and water users' needs in RI . . . all users, not just fish . . . economic, social and environmental issues.

However, E.Marks stated that the Clean Water Act covers social and economic issues. Also, the function of the state is both planning and permitting. Details of permitting should NOT be considered, but simply acknowledgement that permitting happens.

L.Scott stated that RIWRB efforts need to be consistent with existing state and federal law, and that the Clean Water Act is here to stay, and that our focus should be to "maintain biological, chemical and physical integrity of the nations waters".

K.Crawley added that stream flows also need to protect social and economic components of society, and that water for all uses needs to be reserved.

Further discussion regarding the Clean Water Act, users and uses of water, and priorities of water rights continued.

R.Abele acknowledged that there is an "appeal" process to the Clean Water Act requirements, but it was quite rigorous.

A.Bettencourt stated that fish populations go up and down.

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E.Marks added that streams are dynamic . . . fluctuating between drought and abundance . . . that natural variation in precipitation occurs, and these studies try to estimate or predict what these cycles are.

A.Bettencourt expressed his concerns with what will be done after minimum stream flows are established. He added that no presentations have demonstrated that fish populations will never return.

R.Abele mentioned that the Ipswich River literature demonstrated loss of fish populations.

S.Donohue questioned whether the fish studies actually determined that things really are wrong with what we are doing.

E.Marks stated that the Priority Uses subcommittee stated that preference should be given to the following uses:

- Human consumption or sanitation for health and survival
- Livestock and crops
- Other uses

K.Crawley wondered whether priority uses should be linked to specific streams.

A.Bettencourt added that he hadn't seen any place within the literature where exceptions could be made during a drought.

E.Scott noted that page 17, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sentence addressed times of drought.

K.Crawley added that page 46 of the code addressed droughts also.

S.Donohue added that he too was concerned with the phrase "permitting". Further discussion followed regarding planning vs. permitting.

L.Scott recommended that the last sentence of Recommendation #1 be changed, so that it only applied to new withdrawals.

Members attending this meeting reached an agreement on Recommendation #1, which read:

***Watershed specific instream flow protocol is the preferred approach for establishing instream flow standards in Rhode Island. The Subcommittee recognizes that this will take several years to develop and implement. Consequently, the Subcommittee recommends the use of a simplified reconnaissance level method in the interim. The interim method would only be used for new withdrawals and planning purposes.***

### **Recommendation #2**

L.Scott read the second recommendation.

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S.Donohue stated that Recommendation #2, as written, acknowledged credence to RIABF. He added that the DEM White Paper still had issues outstanding . . . and stated that comments received at the hearing still needed to be addressed.

L.Scott added that she had looked at all other available methods, and what other states have done. Also, that she, A.Richardson & Carlene Newman were in the process of reviewing comments received at the hearing.

S.Donohue added that the subcommittee was far from adopting white paper as written. Therefore, at this time, the white paper shouldn't be referred to within the recommendations.

The discussion then moved to the shortfalls of the various streamflow methods.

E.Marks stated that 7Q10 is a lower flow than ABF.

R.Abele added that Recommendation #2, as written, simply says that more work needs to be done.

L.Scott felt that RIABF needs further evaluation as an interim stream flow method.

J.Campbell mentioned that NEABF was currently being used by DEM.

S.Donohue stated that DEM can use any method they wish . . . however, this subcommittee needed to be careful that it doesn't give the appearance that it is recommending RIABF. He added that RIABF should be further evaluated, along with other methods.

E.Marks added that RIABF reflects the natural variability of streams.

S.Donohue stated, and A.Richardson agreed, that 4Q3 is explicitly part of RIABF as a "shut off number".

L.Scott added that RIABF was a modification of NEABF . . . that the subcommittee should look at specific RI gauges . . . and that there is not another good option as a stream flow setting standard.

S.Donohue mentioned that a bias is associated with all of the models presented to date . . . that they have been developed by fish biologists.

E.Marks mentioned that perhaps hydrologists at the NRCS should be included in the evaluation of stream flow models.

K.Crawley added that, in the long term, RIWRB is doing basin studies with USGS which will yield good data, and therefore better models.

J.Campbell added that such work was just starting.

K.Crawley stated that the Impact Subcommittee chose priority areas within the state, and that perhaps the stream flow subcommittee should be doing the same.

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L.Scott agreed, but added that there was a present need for a statewide, interim standard which didn't require a lot of site-specific work, that wasn't too complicated or expensive to implement. She added that the goal is to allow maximum sustainable use, which won't allow stress to the biology of the stream.

S.Donohue felt that there should be two numbers . . . one for planning purposes, the other for maximum sustainable use – and that both CT and NH fell short of doing this.

R.Blodgett recommended the changes to Recommendation #2 be made. . . that the white paper was simply a by-product or break out session of the subcommittee, yet still should be acknowledged somehow.

L.Scott responded that the white paper addressed the first objective of the subcommittee, and that several weeks were spent on this.

J.Campbell added that nobody has accepted the white paper yet.

K.Crawley mentioned that perhaps an interim method was the way to go . . . however, the subcommittee only agreed to consider an interim method.

The specific wording of Recommendation #2 was worked on. The subcommittee then agreed on the following wording for Recommendation #2:

***Rhode Island DEM currently applies the NEABF among other streamflow setting criteria or methods. The subcommittee reviewed NEABF and other streamflow standard setting methodologies. The Rhode Island DEM wrote and presented the draft report “A Presumptive Interim Instream Flow Standard for Rhode Island” (RIDEM, 2003) which includes median monthly flows and lower shutoff flows. The RIDEM has received comments on this report and is reviewing and responding to these comments. The subcommittee recommends RIABF should be further evaluated as an interim streamflow method.***

### **Recommendation #3**

K.Crawley stated that Recommendation #3 should include language on how a long-term approach should be pursued.

S.Donohue added that it should emphasize need for funding.

L.Scott mentioned that the “site specific” goal is different from the “watershed specific” goal.

K.Crawley added that there is a need for a fourth recommendation, specific to funding.

S.Donohue added that site specific methodologies are expensive and therefore costs are a concern.

General discussion ensued on Recommendation #3 wording.

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The specific wording of Recommendation #3 was worked on. The subcommittee then agreed on the following wording for Recommendation #3:

*Site specific empirical stream flow methodologies should continue to be accepted as an alternative to the interim method. The R2 Cross and Wetted Stream Perimeter Methods appear to be acceptable methodologies however, the subcommittee recommends the establishment of guidance in application of these methodologies.*

### **Recommendation #4**

The subcommittee agreed that a fourth recommendation be added, addressing watershed specific approaches.

L.Scott stated that R.Abele had presented information on watershed specific standards . . . CT has done a lot of work, but this subcommittee has not spent much time reviewing their work . . . therefore we may want to back off from referencing their work in our recommendation.

R.Blodgett asked whether the watershed approach should consider land uses within the watershed?

L.Scott added that the value of a watershed approach was that each watershed statewide.

Some general discussion on the Ipswich River and its flow conditions we held.

The specific wording of Recommendation #4 was worked on. The subcommittee then agreed on the following wording for Recommendation #4:

*The Subcommittee recommends development of a watershed specific standard that quantifies the relationship between instream flow and habitat suitability that acknowledges critical resources and existing uses. The subcommittee recognizes that these recommendations are costly and recommends that funding is available for this process.*

### **Recommendation #5**

Discussion began with regard PA's water allocation program and their funding sources.

K.Crawley questioned how standards would be applied, specifically during times of water shortages. She added that page 46, Item 2 of the code refers to actions taken during water "emergencies". She also added that the term "emergencies" should not be equated with "shortages". Additionally, opportunities should be made available for potentially new users, such as AmGen.

The specific wording of Recommendation #5 was worked on. The subcommittee then agreed on the following wording for Recommendation #5:

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*The subcommittee recommends that during periods of drought or water emergency, consideration be given to allocate waters normally within protected minimum flows or levels as necessary for essential uses and to prevent widespread economic harm, but only in so far as such allocation does not permanently impair the biological, chemical, or physical integrity of the water source.*

L.Scott questioned whether e-mailing to everyone for input was appropriate.

E.Marks suggested e-mailing, and then meet next time to review text page by page.

K.Crawley recommended compiling the introduction, restatement of objectives, then recommendations, then grouping text around each recommendation. She added that specific work done on the methodologies should be appended to the end of the document.

Both K.Crawley and A.Richardson offered their assistance in formatting the text.

K.Crawley outlined various proposed deadlines. On or before September 9<sup>th</sup>, she hoped to e-mail the subcommittee's draft report to the full group. On September 25<sup>th</sup>, at the full meeting, this subcommittee's findings would be discussed. She felt that the recommendations would be good enough for the September meeting.

A.Richardson offered to e-mail the recommendations to the entire subcommittee for their review and input.

### **Next meeting**

September 4, 2003, 1:00 p.m.